
Health Equity in the USA

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People in the United States do not enjoy the favourable health outcomes of other rich nations despite spending almost half of the world's health care bill. Disparities in health within the nation are also greater than in other developed countries. Explanations for this fact relate to the greater health inequalities present in the US. The challenge is to get Americans to recognise that they die younger and lead less healthy lives than they should. The political will to create policies that would promote healthy lives will need to be sustained for generations if health disparities are to be overcome.

Introduction

Mention the phrase 'health equity' to most Americans and you get puzzled stares; the term is not in common use anywhere else in the world either. Few relevant articles are identified when the Medline database (the National Library of Medicine of the United States) is searched for both 'health equity' and 'United States'. Broaden the search to 'health inequality', or 'health inequalities' and a few more papers come up. In the United States, the 'health' discussion and debate is all about health care reform. There is an implicit assumption that health care produces health. Asking the question, 'do you want health or health care?' gets little response. In view of this, how important is this concept of health equity?

On average, people in the United States die much younger and suffer worse health, as well as endure serious societal dysfunction, compared to people in other rich nations. The usual explanation is that we engage in too many adverse personal health behaviours and do not have access to the right medicines. Presenting the evidence that personal behaviours affect only a small fraction of our health status as a population leads to 'but....' responses. The idea that health care has limited impact on mortality measures in societies is not believable to most people, regardless of their level of education or even their experience or training in health care.

Health inequalities and health disparities are more widely understood terms than health equity, connoting differences in health outcomes that might be considered unfair or unjust (Braveman 2006). These terms are typically related to socio-economic inequalities in most societies. The nature of the gradient—differences in health between the rich and the poor—has varied historically, so that for example in pre-industrial England, feudal lords died younger than peasants. Before the advent of agriculture, socioeconomic gradients are believed to have been minimal or absent, but today the trend is clear: the better off socioeconomically have consistently poorer health than those less well off (Adler et al. 1994). It is important to understand that these inequities can be remedied (Beckfield and Krieger 2009).

This article will present evidence that inhabitants of the US have worse health than that found in other rich nations. Within the United States the health differentials are vast, with poorer and marginalised groups tending to be considerably less healthy than the privileged. We begin by considering health in rich nations.

Comparisons of Health Status for the USA and other Rich Nations

The US is the richest and most powerful nation in world history. Close to half of the globe's dollar billionaires live there. American military might is unprecedented. The US Declaration of Independence bespeaks an inalienable right for citizens to have life, liberty and the pursuit of happiness. The duration of that life is not specified, however, and today in comparison to other rich nations, it is substantially shorter. This sad comparison has been observed for decades and published in government documents, but is not widely known (United States Congress Office of Technology Assessment 1993).

Few people grasp the meaning of population health measures in the way they do individual vital statistics. For example, someone with a blood pressure of 250 over 140, or 60 over 40, has an emergency to be managed quickly. 'Life expectancy' is a term commonly used to compare the health of populations: the average length of life that would be expected based on death rates for people of different ages at that point in time. Life expectancy has been improving for the past fifty years in the United States and most nations around the world, probably because of generally improved living standards everywhere, but the improvements in the US lag behind those in other rich nations (Bezruchka et al. 2008).

What does a gap of a year or two in life expectancy mean? Life expectancy at birth is over 3.5 years shorter in the United States than the world's healthiest or longest-lived nation, Japan (UNDP 2009). If the leading cause of death in the US (coronary artery disease) was eradicated, and the other disease death rates unaffected, it would only

better

raise US life expectancy about 3 years (Marmot 2004). If the tragedy of September 11, 2001 did not happen, our life expectancy would be approximately 0.01 years greater that year (Li et al. 2003). Thus a health disparity of 3.5 years for the US could be considered a population health emergency. In such a situation where does the call go for help? While there is glaring media attention to the possibility of a global swine flu pandemic, and the earthquake in Haiti was front page news for days, one finds hardly a mention of what might be the US population health disaster. Moreover, other nations do not assist the United States in dealing with this calamity because it is an invisible problem, recognised by few.

There is a growing understanding that health in early life presages what happens to health at older ages. In addition, the health of children is a bellwether of the overall well-being of a society. UNICEF ranks health outcomes for children in rich nations and publishes them regularly. A summary of child well-being appeared in 2007 that demonstrated the US shared the worst outcomes of rich countries with the United Kingdom (UNICEF Innocenti Research Centre 2007). Public outcry in Britain led to the government's producing a plan to make England the best place to raise a child within ten years (UK 2007). However, the media attention in the US was paltry by comparison with that in the UK.

Once childhood is over, the health situation does not improve. A United States Congress report on comparisons of health status among nations revealed that if one attained age 25, the likelihood of reaching retirement age, 65 years, was lower in the US than in the other rich nations (United States Congress Office of Technology 1993). Reports pointing out that the remaining years of life left at age 50 are less in the US than in other rich nations and that the vagaries of medical care are not the reason similarly received little attention (Preston and Ho 2009). The data are clear: the United States has among the greatest health disparity of all rich nations, whatever age groups are compared (Peltzman 2009).

The belief in the American Dream, the vision that individual hard work will provide the ability to purchase good health, has not been verified by research to date. Studies demonstrate that at every level of income, Europeans tend to have better health outcomes than citizens of the US (Avendano et al. 2009). In a study of middle-aged British and American whites poorer Brits had fewer chronic diseases than richer American whites (Banks et al. 2006). Why these differences? The answer is straightforward: inequalities among and within societies have been shown to be strong determinants of health and many other measures of societal function, such as rates of teen pregnancies, incarcerations, crime, educational outcomes, trust, innovation, and mental illness (Wilkinson

and Pickett 2009). A recent study suggests that perhaps a quarter of all deaths in the US may be attributed to the large income gap there (Kondo et al. 2009). Where there is a large income and wealth gap between the top and bottom strata in societies, individual acts to produce health are likely to be constrained and ineffective.

'Health care' sounds so similar to 'health' that people tend to conflate the two terms. While individual medical care can be lifesaving and life enhancing, the evidence is that among populations, the effects of health care are small (House et al. 2008). If structural factors, such as a large hierarchy in society, are major determinants of health, then medical care by its very nature cannot address those issues. Efforts to improve the delivery of medical services to more people in the US will not improve their health. As important a goal as universal access to health care may be for a range of reasons, it has not been found to provide significant improvements to overall population health (Roos et al. 2006).

The inconvenient truth is that life is shorter than it should be in the United States. Some might also consider it nasty and brutish especially when attention is paid to other societal indicators (Wilkinson and Pickett 2009). Given that situation, what is the picture of health disparities among population groups within the United States?

Health Disparities within the US

Today's concern is that the higher social classes in a society being, say, 50% healthier than the lower classes, is unfair and unjust existence (Daniels 2008). In contrast to comparing life expectancy or child mortality rates among nations, there is no standardised way of comparing health disparities for different countries. Socioeconomic status is recorded differently within nations, as are the health measures used, making international comparisons complex. In Western Europe, where reporting is relatively standardised, there are substantial differences in mortality rates among nations, with absolute differences in mortality demonstrating between-country variations, but the relative inequalities are similar. A country such as Sweden has very good health as represented by a long life expectancy and low infant or child mortality, but the relative differences between high status and low status groups—the ratio in death rates between the better and worse off—are similar to those in other European nations (Mackenbach 2009).

In addition to a low average life expectancy overall, the US appears to have worse disparities between those more or less privileged than in other rich nations (Graham 2007). After declining for a period, overall US health disparities have been increasing since about 1990 (Krieger et al. 2008). In one study a subgroup of men in the US with the lowest life expectancy lived less long than the average for men in Pakistan (Marmot 2007). There is a 17-year gap

in life expectancy between men in Washington, DC and nearby suburban Maryland (Marmot and Bell 2009). After reaching the age of 35, men in Harlem lived less long than men in Bangladesh (McCord and Freeman 1990), and these inequalities in New York continue (Karpati et al. 2006). The inequality is especially pronounced among adults, although it may not be increasing for infant deaths (Lin 2009).

Comparisons of US health disparities with those of neighbouring Canada demonstrate that income inequality has more detrimental effects on health status in the US, and the poor are worse off in the US than comparable groups in Canada. Access to medical care does not explain the differences in health disparities between the two nations. Adverse personal health-related behaviours are more common among lower socioeconomic status groups, but the health impacts of these behaviours are greater in the US than in Canada (McGrail et al. 2009). Racial inequalities in health outcomes are considerably less in Canada than in the US (Siddiqi and Nguyen 2010). The context, namely the societal, social and physical environment in which a personal health-related behaviour takes place, has a large effect on that behaviour's health impact. For example, the longest-lived nation, Japan, has about twice the fraction of its male population smoking than either the US or Canada (Bezruchka et al. 2008). In the United States, for the first time, life expectancy has been declining for women in some 20% of US counties (Ezzati et al. 2008). It suggests the presence of a highly toxic, invisible, odourless lethal gas that permeates the United States. Is the US a society in decline?

Recognition of health disparities by the US Federal Government has produced outcome goals for the nation (USDHHS 2000) which aim to eliminate racial disparities in particular. Progress on these goals has been limited at best. It has been estimated that over 83,000 excess deaths in the US could be averted by eliminating the black-white mortality gap (Satcher et al. 2005). Some studies have suggested a decline in some measures of health inequalities around the nation while others have shown increases (Singh et al. 2003; Singh 2003; Singh and Kogan 2007; Singh et al. 2002; Singh and Siahpush 2002; Singh and Siahpush 2006; Singh and Yu 1995). In comparisons between 1990 and 2005, differences between outcomes for Non-Hispanic Blacks and Non-Hispanic Whites have demonstrated improvements for about half of the indicators such as the prevalence of low-birth weight babies and mortality measures such as motor vehicle crashes, cancer, and heart disease, but not for infant mortality or homicide. The overall mortality differences between Non-Hispanic Whites and Blacks have actually widened from 1990 to 2005. Comparisons to an earlier study from 1990 to 1998 suggest a bleaker picture for the more recent period (Orsi et al. 2010). While

there has been little progress for the country as a whole, evidence in that study suggests the picture has worsened in, for example, Chicago with two thirds of the disparity measures widening. According to the authors, 'we are either stagnant or are moving in the wrong direction' (Orsi et al. 2010, 352).

Certain groups within the United States suffer more health disparities than others. Immigrants, considered as a group have longer life expectancy than US-born. Comparing the 1979-81 period to 1999-2001, the disparity is increasing (Singh and Hiatt 2006). Immigrants to the US were found to have less access to health care than the US-born, yet they were healthier. This includes Latinos or Hispanics, especially recent immigrants of Hispanic origin who tend to have better health outcomes than non-Hispanic whites, a finding termed 'the Hispanic or Epidemiologic Paradox' (Franzini et al. 2001; Markides and Coreil 1986). Cultural aspects likely interact in complex ways with the social and economic context within the US to influence these health inequalities (Mansyur et al. 2009). The health advantage for Latinos declines the longer they remain in the US, likely because of unhealthy adaptation to increased stress (Kaestner et al. 2009).

Much evidence points to the importance of early life for producing health in adulthood. Various health-related factors present in this period are about as important for adult health as what happens later in life (Hertzman and Power 2006). A phenomenon known as the intergenerational transfer of health status occurs, so that nutritional, environmental and stress factors impact the health of future generations (Emanuel et al. 2004; Gillman et al. 2009, Gluckman and Hanson 2009). Exposure to various kinds of stresses in early life is an important biological mechanism that can perpetuate inequalities (Wadhwa et al. 2009). Lifetime nutrition of the mother before she gets pregnant, for example, is important to the health of her child. Similarly, the type of foetal and early childhood growth can be significant, with low birth weight and rapid catch-up growth likely to lead to more chronic disease in later life (Barker 1998; Barker et al. 2005; Harding 2001). Efforts are needed to integrate all these concepts into a holistic explanatory model of trends in health and other disparities (Mulder et al. 2009; Wilkinson and Pickett 2009). In future generations, we will come to accept that early life lasts a lifetime, thus limiting the pace of potential improvements in health disparities.

Improving Health Inequities in the USA

The political choices that deem how we apportion income and wealth appear to be the most important factors impacting the health of populations today. There is a growing awareness that further economic growth may not be beneficial for well-being in developed countries (Bezruchka 2009b; Wilkinson and Pickett 2009).

Consistent with that observation, we see that in rich nations health appears to improve during economic downturns, in contrast to booms. Other solutions related to economic justice, not growth, must be found (Whiteis 2000).

An important challenge today is to help the US public understand health in this broader manner. This perspective represents a paradigm shift in thinking about health and, like most if not all paradigm shifts, is strongly resisted by the scientific establishment (Bezruchka 2009a). Medical students, and the doctors they become, are unaware of these relationships. Perhaps a quarter of graduating medical students think that the US is the world's healthiest nation (Agrawal et al. 2005)! If medical doctors do not understand health, should we require that licensing examinations for doctors test this knowledge?

A variety of approaches have been considered to eliminate health inequities (Satcher and Higginbotham 2008; Satcher and Rust 2006; Berkman 2009). Public health departments in the United States want to decrease health disparities but given that they are government employees their tools are limited because of political constraints. Some would argue that getting caught up in the current debate on health care reform is a severe distraction from the more basic issue of health disparities. Given the importance of early life in health production and the recognition that salutary policies will require several generations to see effects, policies appropriate for the US need to be developed. These solutions do not need to be developed in a vacuum however; a good start would simply be considering successful strategies used by other nations (Hall and Lamont 2009; Heymann et al. 2006; Vallgarda 2007; Vallgård 2007; Hofrichter 2003). For example, the United States stands alone among rich nations in offering neither paid parental leave nor paid prenatal leave. Annual leave and other generous universal welfare benefits are also lacking in the US (Heymann 2009). Enacting and enforcing such legislation might be the most cost-effective way to decrease health disparities to a level consistent with other European nations (Lundberg et al. 2008).

Political changes required to reduce health inequalities in the US are not that different from those espoused by Presidents of both major parties in the past. President Roosevelt proposed an income cap in 1942, while President Nixon proposed a guaranteed income plan in 1969 (Burke and Burke 1974; Pizzigati 2004). Both were responding to popular protests, and the democratic will of the people. Some say that a society gets what it measures; if that is so, then US health disparities must be at the forefront of public attention. We need goals with realistic timeframes and clear-cut ways to measure progress. Prominent epidemiologist Geoffrey Rose (1992) presents the challenge faced by those attempting to promote health equity by reducing health inequalities:

The primary determinants of disease are mainly economic and social, and therefore its remedies must also be economic and social. Medicine and politics cannot and should not be kept apart.

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The freedom of it

Watch now, was that his hand moving again?
Did his chin just contort a bit there?
Is inside his trousers all still now too

drained into the lay-by of the years he had?
I whistle to the singing birds, *I am free, free*
I am free, to all who want to listen, *I am free*.

His hat dropped from his head this morning,
yeah, just hours ago that, and I drained relief
for what cliché would call a burden

of a man who drank too much, a man who sang,
a man who left his marks, beating rhythm
into everyday things, me for instance, his wife.

NOEL KING,
TRALEE, IRELAND